

CLAIMS

1. A disk- or bar-shaped tool for chip-removing machining, in particular for cutting profiles in a workpiece such as a rotationally driven crankshaft to be machined, having several peripheral cutting inserts (11) radially clamped to a tool mount (10),
characterized in that
at least one cutting insert (11) is fixed in a cassette-shaped holder (12) and the cassette-shaped holder (12) is axially adjustable by means of an adjustment wedge (13) near where it bears on the cutting insert (11) and/or is radially adjustable by an adjustment wedge (33).

2. The disk-shaped tool according to claim 1, characterized in that the cassette-shaped holder (12) has a doubly bent shape (15, 16, 17) with an upper part (15) having a front face forming the support surface for the cutting insert (11) and a back face bearing on an adjustment wedge (13), and a lower part (17) extending parallel to but offset from the upper part (15) is fixed on the disk-shaped mount (10) by means of a mounting screw (31, 35) passing through a bore, the upper and lower parts (15 and 17) being connected by a central transverse web (16) and wherein the adjustment wedge (13) can shift the upper part (15) into different axial positions by bending.

3. The tool according to claim 1 or 2, characterized by an axial range of adjustment between 0.1 mm and 0.3 mm.

4. The tool according to one of claims 1 to 3, characterized in that the lower part (17) of the cassette-shaped holder (12) has a threaded bore into the rear of which engages a screw (31) seated in the tool mount (10).

5. The tool according to one of claims 1 to 3, characterized in that to radially adjust the cassette-shaped holder (12) there is an adjustment wedge (33) that bears on a lower side face of the holder (12) and that is movable to effect a radial adjustment of the holder (12).

6. The tool according to claim 5, characterized in that the lower part (17) of the cassette-shaped holder (12) has a stepped bore (40) accommodating a shaft and a head of a mounting screw (34) whose head bears with a face (3) on a complementary shoulder (37) of the bore, a shaft of the mounting screw (35) engaging in a threaded bore (36) of the disk-shaped tool mount.

7. The tool according to one of claims 1 to 6, characterized in that the adjustment wedge (13, 33) has a throughgoing threaded bore receiving a threaded end of a double-threaded screw (23, 34) whose other end is engaged in a threaded bore of the disk-shaped tool mount (10).

8. The tool according to one of claims 1 to 7,
characterized in that to clamp the cassette-shaped holder (12) in
place there is a counter screw (29) that engages in a stepped bore
of the disk-shaped tool mount and a threaded blind bore (30) in a
5 back face of the upper part (15) of the cassette-shaped support
(12).

9. The tool according to one of claims 2 to 8,
characterized in that the mounting screw for clamping the cassette-
shaped holder (12) bears with axially and/or radial prestress on
10 the disk- or bar-shaped tool mount (10).

10. The tool according to one of claims 1 to 9,
characterized in that the cutting insert (11) is indexable and has
a PKD insert.

11. The tool according to one of claims 1 to 10,
15 characterized in that the disk-shaped tool mount (50) carries at
least one tangentially clamped cutting insert (51) or a bar-shaped
tool mount carries on its upper edge a clamped cutting insert,
wherein the cutting insert (51) that is tangentially clamped or
clamped to the upper edge is radially adjustable for working the
20 outer surface profile of a workpiece.

12. The tool according to claim 11, characterized in
that the tangentially or upper-edge-mounted cutting insert (51) is

fixed in a cassette (52) that is mounted in a tool-mount seat and is adjustable radially by an adjustment wedge (55).

13. The tool according to claim 12, characterized in that the cassette (52) is clamped by at least one clamping wedge (53).

14. The tool according to claim 12 or 13, characterized in that the clamping wedge (53) and/or the adjustment wedge (55) are engaged by a double-threaded screw (54 or 56) having one end engaged in a throughgoing hole of the adjustment wedge (55) or of the clamping wedge (53) and another end in a threaded bore of the tool mount (50).